

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-253839

(43)Date of publication of application : 30.09.1997

(51)Int.Cl.

B23K 1/14  
F04B 39/12

(21)Application number : 08-063110

(71)Applicant : DENSO CORP

(22)Date of filing : 19.03.1996

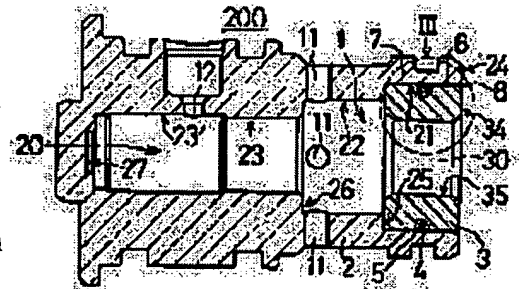
(72)Inventor : MORI HIDEMI  
OKUMURA NOZOMI  
YAMAMOTO TAKESHI

## (54) INTERNAL CAVITY MEMBER, MANUFACTURE THEREOF, AND PUMP THEREFOR

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an internal cavity member capable of preventing non-wetting of the brazing filler metal and defective distribution of the brazing filler metal without greatly increasing the cost and easy in the inspection of the defects, its manufacturing method, and a pump to which the internal cavity member is applied.

**SOLUTION:** A pump cylinder 200 comprises a cylinder member 2, and a ring member 3 which is fitted and brazed to a piston hole 20, and a recessed part 1 as an internal cavity is formed. A groove 5 for holding the brazing filler metal is formed in an outer circumferential surface of the ring member 3, and a first half part 7 and a second half part 6 are fitted to an inner circumferential surface 21 through interference fit and the running fit respectively. The ring member 3 is press-fitted to the piston hole 20 with the brazing filler metal 4 being held in the groove 5, and when the temperature rises and the brazing filler metal 4 is melted, the molten brazing metal is excellently distributed around a running-fit part 8 to realize the brazing in a watertight manner. The molten brazing filler metal 4 is not leaked forward through a shrink-fit part 7, an inner circumferential surface 22 of the recessed part 1 is kept clean, and a sliding part of the piston is not damaged.



### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office